

ABSTRACT

An apparatus for weighing materials online is disclosed, which belongs to an art of online weighing of material. The apparatus comprises: a light-emitting unit, emitting light beams irradiating on the surface of materials transported on a belt to form a bright
5 projection which has the same shape as that of a upper contour of a cross-section of the material; and a CCD camera for continuously picking up images of the bright projection on the upper contour of the cross-section of the material; and an image capture unit, connected to the CCD camera for continuously capturing the images; and a central
10 processing unit, connected to the image capture unit for processing the images captured by the image capture unit to compute a weight of the material. The present invention has many advantages, such as, high precision, good reliability and stability, which applies to the belt without a constant speed and a condition that a bulk shape and the bulk density of the material change largely. And the radiation safety of the present invention is good.